

APPENDIX B

COMMUNITIES PARTICIPATING IN THE STUDY AND THEIR DISTRIBUTION  
BY SIZE AND GEOGRAPHICAL LOCATION



Table B-1. Geographical distribution of communities

Region	States	Number
1	Conn., Maine, Mass., N. H., R. I., Vt.	2
2	N. J., N. Y.	16
3	Del., Md., Pa., Va., W. Va.	18
4	Ala., Fla., Ga., Ky., Miss., N. C., S. C., Tenn.	20
5	Ill., Ind., Mich., Minn., Ohio, Wis.	23
6	Ark., La., N. M., Okla., Tex.	24
7	Iowa, Kans., Mo., Nebr.	10
8	Colo., Mont., N. Dak., S. Dak., Utah, Wyo.	2
9	Ariz., Calif., Hawaii, Nev.	12
10	Alaska, Idaho, Oreg., Wash.	9

Table B-2. List of communities with completed questionnaire

City	State	Unit	1980 Population
Mobile	Ala.	County	364,000
Columbia	Ark.	County	26,644
Jacksonville	Ark.	City	27,600
Maricopa	Ariz.	County	1,508,000
Anaheim	Calif.	City	221,800
Bakersfield	Calif.	City	105,600
Brisbane	Calif.	City	3,000
El Segundo	Calif.	City	13,800
Humboldt	Calif.	County	1,080,000
Oakland	Calif.	City	339,300
Orange	Calif.	County	1,931,500
Riverside	Calif.	County	663,900
San Jose	Calif.	City	636,600
South Gate	Calif.	City	66,800
Yolo	Calif.	County	113,400
New Castle	Del.	County	399,000
Gulf	Fla.	County	10,700
Santa Rosa	Fla.	County	56,000
Tampa	Fla.	City	271,500
Brunswick	Ga.	City	17,600
Dalton	Ga.	City	20,700
Fulton	Ga.	County	590,000
Richmond	Ga.	County	181,600
Smyrna	Ga.	City	20,300
Benton	Iowa	County	23,600
Clinton	Iowa	County	57,100
Des Moines	Iowa	County	46,200
Story	Iowa	County	72,300
Woodbury	Iowa	County	100,884
Bannock	Idaho	County	65,400
Madison	Ill.	County	247,700
Marshall	Ill.	County	14,500
North Chicago	Ill.	City	38,800
Will	Ill.	County	324,500
Delaware	Ind.	County	128,600
Posey	Ind.	County	25,400
Johnson	Kans.	County	270,300
Sedgwick	Kans.	County	366,500
Wyandotte	Kans.	County	172,300
Ballard	Ky.	County	8,800
Hardin	Ky.	County	88,900
Marshall	Ky.	County	25,600
McCracken	Ky.	County	61,300
Ascension	La.	County	50,100
Baton Rouge	La.	City	219,500
Convent	La.		

Table B-2. Continued

City	State	Unit	1980 Population
St. Charles Parish	La.	County	37,500
Danvers	Mass.	City	26,200
Baltimore	Md.	City	786,700
Bay	Mich.	County	119,900
Benton Harbor	Mich.	City	14,700
Grand Haven	Mich.	City	11,800
Kalamazoo	Mich.	County	212,400
Manistee	Mich.	County	23,000
Marquette	Mich.	County	74,100
Marysville	Mich.	City	7,300
Oakland	Mich.	County	1,011,800
Rosemount	Minn.	City	5,100
Duson	Mo.	City	
Jackson	Miss.	County	118,000
Warren	Miss.	County	51,600
Yellowstone	Mont.	County	108,000
Pitt	N.C.	County	83,700
Beatrice	Nebr.	City	12,900
Elizabeth	N.J.	City	106,200
Gibbstown	N.J.	City	5,700
Little Falls	N.J.	City	11,700
Mt. Holly	N.J.	City	10,800
Salem	N.J.	County	64,700
Somerset	N.J.	County	203,100
Union	N.J.	County	504,100
Wayne	N.J.	City	49,100
West Caldwell	N.J.	City	11,407
Henderson	Nev.	City	24,400
Chautauqua	N.Y.	County	146,900
Delaware	N.Y.	County	46,900
Lewis	N.Y.	County	25,000
Newburgh	N.Y.	City	23,400
Rensselaer	N.Y.	County	152,000
Utica	N.Y.	City	75,600
Waterloo	N.Y.	City	5,300
Allen	Ohio	County	112,200
Fairfield	Ohio	County	93,700
Hamilton	Ohio	County	873,100
Solon	Ohio	City	14,300
Stark	Ohio	County	378,800
Toledo	Ohio	City	354,600
Enid	Okla.	City	50,400
Muskogee	Okla.	City	40,000
Osage	Okla.	County	39,300
Rogers	Okla.	County	46,400
Woodward	Okla.	County	21,200

Table B-2. Continued

City	State	Unit	1980 Population
Portland	Oreg.	City	366,400
Berks	Pa.	County	312,500
Blair	Pa.	County	136,600
Bucks	Pa.	County	479,200
Carbon	Pa.	County	53,285
Philadelphia	Pa.	City	1,688,200
Somerset	Pa.	County	81,200
Providence	R.I.	City	156,800
Kershaw	S.C.	County	39,000
York	S.C.	County	106,700
Baytown	Tenn.	City	
Sharon	Tenn.	City	1,100
Sullivan	Tenn.	County	144,000
Beaumont	Tex.	City	118,100
Brazoria	Tex.	County	169,600
Calhoun	Tex.	County	19,600
Dallas	Tex.	City	904,000
Dimmitt	Tex.	City	11,400
Dumas	Tex.	City	12,200
Ector	Tex.	County	115,400
Houston	Tex.	City	1,594,100
Hutchinson	Tex.	County	26,300
Orange	Tex.	County	83,800
Pasadena	Tex.	City	112,600
Port Arthur	Tex.	City	61,200
Texas City	Tex.	City	41,400
Hopewell	Va.	City	23,400
Portsmouth	Va.	City	104,600
York	Va.	County	35,500
Camas	Wash.	City	5,700
Cowlitz	Wash.	County	79,600
Skagit	Wash.	County	64,200
Snohomish	Wash.	County	337,000
Spokane	Wash.	City	341,800
Walla Walla	Wash.	County	47,500
Whatcom	Wash.	County	106,700
Brown	Wis.	County	175,300
Madison	Wis.	City	170,600
Oneida	Wis.	County	31,200
Marinette	Wis.	City	12,000
Kanawha	W. Va.	County	231,400
Marshall	W. Va.	County	41,600
Putnam	W. Va.	County	38,200
Laramie	Wyo.	County	68,600

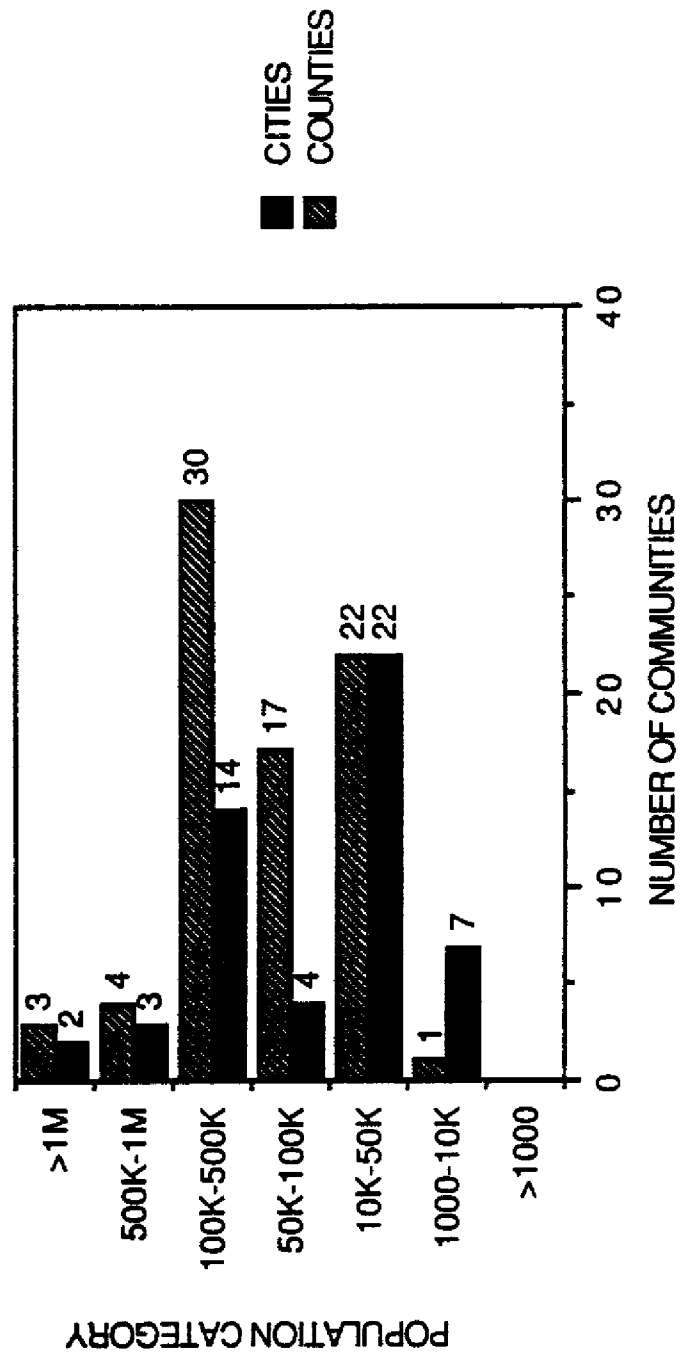


Fig. B-1. Distribution of sample communities.





APPENDIX C

DATA FROM THE FACILITY QUESTIONNAIRES ON PUBLIC  
ALERT AND NOTIFICATION

(N = 134)



Table C-1. Primary communications equipment used to notify the community of a chemical accident

Communication method	Facility response (%)
Commercial telephone	43.3
Two-way radio	9.0
Dedicated telephone	9.7
Dedicated radio	6.0
Pager	0.
Sirens	3.7
In person	3.0
PA/loudspeakers	0.
Alarm system	3.7
911	13.4

#### Clarity of Interaction

##### C-1. Identification of designated official responsibility for receiving an alert from the chemical facility. (%)

1.5	Identified name and position
9.0	Identified position and organization
5.2	Identified position only
60.4	Identified organization only
23.8	Did not identify

##### C-2. Identification of designated official responsibility for sending an alert from the chemical facility. (%)

93.3	Identified by title
6.7	Not identified

##### C-3. Identification of designated backup official responsible for sending an alert from the chemical facility. (%)

50	Identified by title
50	Not identified

##### C-4. Identification of off-hour alert responsibility. (%)

48.5	Same
3.7	Different, not specified
35.8	Different, specified
12.0	No response

C-5. How has your facility's emergency organization coordinated with each of the following agencies/organizations in the past several years? (%)

Circle letter of those that exist in	No coordination at all your area	Initial/introductory contact	Developed emergency response plans only	Ongoing coordinated emergency effort with	Participated in emergency exercises with
Local fire	0	14.9	9.0	25.4	44.8
Other internal facility org.	11.2	3.0	4.5	20.9	34.4
Local/county police	5.2	23.1	11.2	20.5	30.6
Local civil defense	10.4	16.4	7.5	22.4	33.6
State police	32.8	17.2	3.0	12.7	20.9
Industry mutual aid association	20.9	8.2	6.7	16.4	27.6
Hospital emergency rooms	11.5	23.9	13.4	17.9	23.1
State emergency	20.5	29.9	9.0	9.0	11.2
State EPA	11.7	26.9	13.4	28.7	8.2

Number of exercises within past 2 years:

Group	Mean number of exercises
Local fire	2.0
Other internal facility organization	6.2
Local/county police	1.2
Local civil defense	2.3
State police	0.9
Industry mutual aid association	2.5
Hospital emergency rooms	0.8
State emergency	0.5
State EPA	0.4

Table C-2. Clarity of emergency procedures

Type procedure	Status (%)		
	None	Vague	Clear/SOP
Decision making	8.2	56.0	33.6
Communication	9.7	53.0	33.6

C-6. Overall assessment of the capability to provide a timely warning to the public within 5 miles of the facility in the event of a serious emergency. (%)

82.1 It is highly certain that an effective warning would be made  
 12.7 It is somewhat certain that an effective warning would be made  
 0.7 It is somewhat uncertain that an effective warning would be made  
 0 It is highly uncertain that an effective warning would be made  
 4.5 Missing

C-7. Weakest link in the sequence of tasks that are involved in getting a timely and effective warning to the public around the chemical facility. (%)

35.1 Problems in disseminating alert and notification to the public  
 20.1 No weak links  
 14.2 Size of population or area at risk  
 6.7 Communication problems between the facility and the community  
 3.7 Communication problems within facility  
 3.7 Lack of planning  
 1.5 Feasibility of public protection  
 3.0 Cooperation from the community  
 0.7 Lack of training  
 4.5 Communication problems within the community  
 0.7 Monitoring detection  
 0.7 Problems in warning special populations  
 13.4 Other



## APPENDIX D

### WARNING SYSTEMS REFERENCES AND BIBLIOGRAPHY





## WARNING SYSTEM REFERENCES AND BIBLIOGRAPHY

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